

Design Criteria for Span Tables:

Values in the maximum allowable span tables provided herein are subject to the following general criteria and additional criteria shown on individual span tables sheets. Values in span tables are based on the same engineering methodology and calculation algorithms used for U-Builder and are provided here for reference.

Building Assumptions

- Building Risk Category: II
- Mean Roof Height: 30ft
- Roof Pitch: 0°-45°
- Site Elevation: 0 ft

Wind Design Assumptions

- Wind loads used are based on ASCE 7-16 Sec 29.4.4 with Provisions from SEAOC PV2-2017
- Exposure Category B, C, or D
- Basic Wind Speed = 90 – 180 mph
- Level terrain. Topographic factor, $k_{zt} = 1.0$
- $\gamma_E = 1.0$ for 'Interior' spans, $\gamma_E = 1.5$ for 'Exposed' spans (ASCE 7-16, Fig. 29.4-7)

Snow Design Assumptions

- Ground Snow Load = 0-100 psf
- Exposure Factor coefficients of Partially Exposed condition
- Thermal Factor = 1.0
- Results based on uniform snow load

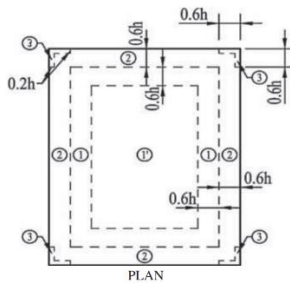
Seismic Design Assumptions

- 0.2-s Spectral Response Acceleration, $S_S \leq 3$
- $S_S = 1.25$, 3 per criteria shown on individual span tables sheets.
- $S_1 = 0.5$
- Seismic site class D-Default

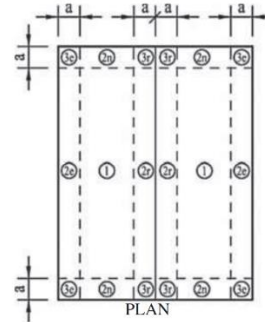
Span Tables

Array Assumptions

- Module orientation and Rail direction per criteria shown on individual span tables sheets.
- Maximum module dimensions of 40.1" x 67" (~19 sq.ft, 47.65 lbs) and 41" x 80" (~23 sq.ft, 58.6 lbs) per criteria shown on individual span tables sheets.
- Minimum distance between modules and roof edge is at least twice the module height above roof surface.
- Modules are parallel to roof surface and maximum height above roof surface is 5" to 10" depending on attachment type.
- Gaps between module rows and columns is 0.25" in to 1" depending on clamp type.
- 'Exposed' spans as defined in ASCE 7-16 sec. 29.4.4 shall be used when any part of an exposed module or panel as is attributed to that span.
- The most restrictive of all roof zone spans shall be used when any part of the module is attributed to that span.
- Zone should be considered as per ASCE 7-16, Fig. 30.3-2A to 30.3-2D



Gable Roofs $\theta \leq 7^\circ$



Gable Roofs $7^\circ < \theta \leq 45^\circ$

Grouping of ASCE 7-16 Roof Zones (Gable and Flat)

Roof Tilt 0° - 7°

Roof Zone 1 = 1

Roof Zone 2 = 2

Roof Zone 3 = 3

Roof Tilt 7° - 27°

Roof Zone 1 = 1, 2e

Roof Zone 2 = 2n, 2r, 3e

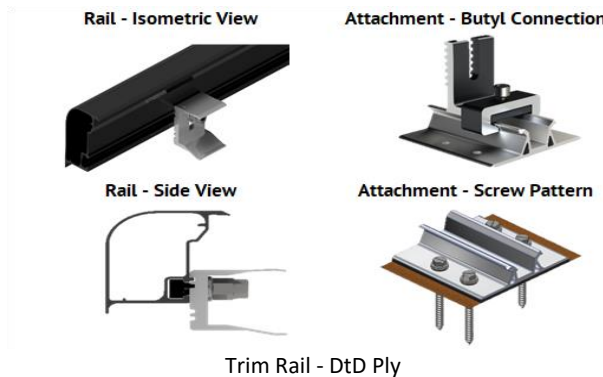
Roof Zone 3 = 3r

Roof Tilt 27° - 45°

Roof Zone 1 = 1, 2e, 2r

Roof Zone 2 = 2n, 3r

Roof Zone 3 = 3e



Ground Snow Load (psf)	Wind Exposure Category	Roof Tilt Angle (deg)	Panel Exposure	Basic Wind Speed (mph)																																									
				90			95			100			105			110			115			120			130			140			150			160			170			180					
				Roof Wind Zone																																									
				1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3						
0	B	0-7	Interior	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31							
			Exposed	31	31	31	27	31	31	31	24	31	31	22	31	28	20	31	25	18	31	23	16	29	21	15	24	18	12	15	11	8	14	10	7	12	9	6	9						
		7-20	Interior	31	31	31	31	31	31	31	31	31	30	31	31	27	31	29	24	31	27	22	31	24	20	31	20	17	27	17	14	23	15	12	20	13	11	18	11	9	16	10	8		
			Exposed	31	29	24	31	31	26	21	31	23	19	31	21	17	29	19	16	27	17	14	24	16	13	20	13	11	17	11	9	15	10	8	13	8	7	11	7	6	10	7	5		
		20-27	Interior	31	31	31	31	31	31	31	31	31	31	31	31	31	30	31	31	31	30	31	31	23	31	30	21	31	25	17	31	21	14	31	18	12	28	16	11	24	14	9	21	12	8
			Exposed	31	31	26	31	31	31	23	31	28	20	31	25	17	31	23	16	31	21	14	31	19	13	28	16	11	24	14	9	20	12	8	18	10	7	16	9	6	14	8	5		
	27-45	Interior	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	30	32	32	27	32	31	22	30	27	18	26	23	15	22	20	13	20	18	11	17	16	10	
		Exposed	32	32	32	32	32	32	29	32	32	25	32	32	22	32	29	20	29	26	18	27	24	16	23	20	13	19	17	11	17	15	9	14	13	8	13	11	7	11	10	6			
	C	0-7	Interior	31	31	30	31	31	26	31	31	23	31	30	21	31	27	19	31	25	17	31	23	16	26	19	13	22	16	11	19	14	10	17	12	8	15	11	7	13	9	7			
			Exposed	31	27	19	31	24	17	30	22	15	27	19	14	24	18	12	22	16	11	20	15	10	17	12	9	14	10	7	12	9	6	11	8	5	10	7	5	8	6	4			
		7-20	Interior	31	31	26	31	28	23	31	25	21	31	23	18	31	20	27	19	19	15	26	17	14	12	19	12	10	16	10	9	14	9	7	12	8	7	12	8	7	11	7	6		
			Exposed	31	20	17	28	18	15	25	16	13	23	15	12	20	13	11	19	12	10	17	11	9	14	9	8	12	8	6	10	7	6	9	6	5	8	5	4	7	4	4	4		
20-27		Interior	31	31	29	31	31	25	31	30	22	31	27	19	31	25	17	31	22	15	31	20	14	30	17																				

[illegible]

[illegible]



Risk Category

Roof Height

Seismic

Module Area

Orientation

Rail Direction

Rail Type

Clamp

Attachment

Maximum Allowable Spans for Rooftop Solar Panels Parallel to the Roof Surface (inches)

[illegible]



ASCE 7-16
Design Standard

II
Risk Category

30 ft
Roof Height

Ss = 1.25
Seismic

19 sq.ft
Module Area

LANDSCAPE
Orientation

CROSS-SLOPE
Rail Direction

Trim
Rail Type

SFM
Clamp

SFM D10-Ply
Attachment

SPAN TABLES

Maximum Allowable Spans for Rooftop Solar Panels Parallel to the Roof Surface (inches)

Ground Snow Load (psf)	Wind Exposure Category	Roof Tilt Angle (deg)	Panel Exposure	Basic Wind Speed (mph)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
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[illegible]



11

30 ft

S_s = 1.25

19 sq.ft
Module Area

LANDSCAPE

CROSS-SLOPE
Rail Direction

Trim
Rail Type

SFM
Clamp

SFM DtD-Ply

SPAN TABLES

Maximum Allowable Spans for Rooftop Solar Panels Parallel to the Roof Surface (inches)

[illegible]

[illegible]

[illegible]

[illegible]



ASCE 7-16
Design Standard

II
Risk Category

30 ft
Roof Height

Ss = 1.25
Seismic

23 sq.ft
Module Area

PORTRAIT
Orientation

CROSS-SLOPE
Rail Direction

Trim
Rail Type

SFM
Clamp

SFM D1D-Ply
Attachment

SPAN TABLES

Maximum Allowable Spans for Rooftop Solar Panels Parallel to the Roof Surface (inches)

Ground Snow Load (psf)	Wind Exposure Category	Roof Tilt Angle (deg)	Panel Exposure	Basic Wind Speed (mph)																																																																																																							
				90								95								100								105								110								115								120								130								140								150								160								170								180							
				Roof Wind Zone																																																																																																							
				1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3																																																											
60	B	0-7	Interior	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7																																																									
			Exposed	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7																																																							
		7-20	Interior	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7																																																						
			Exposed	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7																																																						
		20-27	Interior	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10																																																				
			Exposed	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10																																																				
	C	0-7	Interior	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7																																																					
			Exposed	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7																																																						
		7-20	Interior	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7																																																					
			Exposed	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7																																																						
		20-27	Interior	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10																																																			
			Exposed	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12																																																				
D	0-7	Interior	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7																																																						
		Exposed	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7																																																							
	7-20	Interior	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8																																																						
		Exposed	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8																																																							
	20-27	Interior	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11																																																					
		Exposed	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11																																																					
70	B	0-7	Interior	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6																																																					
			Exposed	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6																																																						
		7-20	Interior	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6																																																					
			Exposed	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6																																																						
		20-27	Interior	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8																																																				
			Exposed	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8																																																					
80	B	0-7	Interior	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5																																																					
			Exposed	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5																																																						
		7-20	Interior	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5																																																					
			Exposed	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5																																																						
		20-27	Interior	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7																																																					
			Exposed	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7																																																						
90	B	0-7	Interior	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9																																																					
			Exposed	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9																																																						
		7-20	Interior	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9																																																					
			Exposed	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9																																																						
		20-27	Interior	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11																																																				
			Exposed	11	11	11	11	11	11	11	11	11	11	11	11																																																																																												

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Ground Snow Load (psf)	Wind Exposure Category	Roof Tilt Angle (deg)	Panel Exposure	Basic Wind Speed (mph)																																								
				90			95			100			105			110			115			120			130			140			150			160			170			180				
				Roof Wind Zone																																								
1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3									
0	B	0-7	Interior	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31								
			Exposed	31	31	31	27	31	31	31	24	31	31	22	31	28	20	31	25	18	31	23	16	29	21	15	24	18	12	15	11	8	14	10	7	12	9	6						
		7-20	Interior	31	31	31	31	31	31	31	31	31	31	30	31	31	27	31	29	24	31	27	22	31	24	20	31	20	17	27	17	14	23	15	12	20	13	11	18	11	9	16	10	8
			Exposed	31	29	24	31	31	26	21	31	23	19	31	21	17	29	19	16	27	17	14	24	16	13	20	13	11	17	11	9	15	10	8	13	8	7	11	7	6	10	7	5	
		20-27	Interior	31	31	31	31	31	31	31	31	31	31	31	31	31	30	31	31	27	31	31	23	31	30	21	31	25	17	31	21	14	31	18	12	28	16	11	24	14	9	21	12	8
			Exposed	31	31	26	31	31	23	31	28	20	31	25	17	31	23	16	31	21	14	31	19	13	28	16	11	24	14	9	20	12	8	18	10	7	16	9	6	14	8	5		
	27-45	Interior	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	30	32	32	30	32	32	30	27	18	26	23	15	22	20	13	20	18	11	17	16	10	
		Exposed	32	32	32	32	32	32	29	32	32	25	32	32	22	32	29	20	29	26	18	27	24	16	23	20	13	19	17	11	17	15	9	14	13	8	13	11	7	11	10	6		
	C	0-7	Interior	31	31	30	31	31	26	31	31	23	31	30	21	31	27	19	31	25	17	31	23	16	26	19	13	22	16	11	19	14	10	7	12	8	15	11	7	13	9	7		
			Exposed	31	27	19	31	24	17	30	22	15	27	19	14	24	18	12	22	16	11	20	15	10	17	12	9	14	10	7	12	9	6	11	8	5	10	7	5	8	6	4		
		7-20	Interior	31	31	26	31	28	23	31	25	21	31	23	18	31	20	27	19	19	15	26	17	14	12	19	12	10	16	10	9	14	9	7	12	8	7	12	8	7	11	7	6	
			Exposed	31	20	17	28	18	15	25	16	13	23	15	12	20	13	11	19	12	10	17	11	9	14	9	8	12	8	6	10	7	6	9	6	5	8	5	4	7	4	4	4	
20-27		Interior	31	31	29	31	31	25	31	30	22	31	27	19	31	25	17	31	22	15	31	20	14	30	17	12	26	15																

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Ground Snow Load (psf)	Wind Exposure Category	Roof Tilt Angle (deg)	Panel Exposure	Basic Wind Speed (mph)																																						
				Roof Wind Zone																																						
				90			95			100			105			110			115			120			130			140			150			160			170			180		
				1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3			
90	B	0-7	Interior	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5					
			Exposed	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5					
		7-20	Interior	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6				
			Exposed	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6				
		20-27	Interior	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8			
			Exposed	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8				
	27-45	Interior	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	9	9	9	9	9			
		Exposed	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	9	9	9	9	9				
	C	0-7	Interior	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5				
			Exposed	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5					
		7-20	Interior	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6				
			Exposed	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6				
		20-27	Interior	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	7	8	8	7	8			
			Exposed	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	7	8	8	7	8					
	27-45	Interior	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	9	9	9	9	9					
		Exposed	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	9	9	9	9	9					
	D	0-7	Interior	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	5				
			Exposed	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	5	6	5	3					
		7-20	Interior	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	5	6	5	3				
			Exposed	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	5	6	5	3					
		20-27	Interior	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	8	9	8	9	7	5				
			Exposed	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	8	9	8	9	7	5					
	27-45	Interior	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	10	10	9	9	8	8	5				
		Exposed	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	10	10	9	9	8	8	5					
100	B	0-7	Interior	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5					
			Exposed	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5					
		7-20	Interior	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5				
			Exposed	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5				
		20-27	Interior	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7				
			Exposed	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7					
	27-45	Interior	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9					
		Exposed	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9						
	C	0-7	Interior	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5					
			Exposed	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5					
		7-20	Interior	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5				
			Exposed	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5				
		20-27	Interior	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7				
			Exposed	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7					
	27-45	Interior	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9					
		Exposed	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9					
	D	0-7	Interior	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5					
			Exposed	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5					
		7-20	Interior	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6				
			Exposed	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6				
		20-27	Interior	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8				
			Exposed	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8				
	27-45	Interior	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10				
		Exposed	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10				

Ground Snow Load (psf)	Wind Exposure Category	Roof Tilt Angle (deg)	Panel Exposure	Basic Wind Speed (mph)																																									
				90			95			100			105			110			115			120			130			140			150			160			170			180					
				Roof Wind Zone																																									
				1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3						
0	B	0-7	Interior	52	52	52	52	52	52	52	52	52	52	51	52	52	46	52	52	42	52	52	38	52	46	32	52	39	28	47	34	24	41	29	21	36	26	18	32	23	16				
			Exposed	52	52	46	52	52	41	52	52	37	52	47	33	52	43	30	52	39	27	49	35	25	41	30	21	35	25	18	30	22	15	26	19	14	23	17	12	21	15	11			
		7-20	Interior	52	52	52	52	52	52	52	52	50	52	52	45	52	49	41	52	45	37	52	41	34	52	35	28	46	29	24	39	25	21	34	22	18	30	20	16	27	17	14			
			Exposed	52	52	49	40	52	44	36	52	39	32	52	35	29	49	43	26	45	29	24	41	27	22	35	22	18	29	19	16	25	17	14	22	14	12	20	13	10	17	11	9		
		20-27	Interior	52	52	52	52	52	52	52	52	52	52	52	51	52	52	45	52	52	40	52	50	35	52	42	28	52	36	24	52	31	21	46	27	18	41	24	16	36	21	14			
			Exposed	52	52	45	52	52	38	52	48	33	52	43	29	52	39	26	52	35	24	52	32	22	47	27	18	40	23	16	34	20	14	30	17	12	26	15	10	23	14	9			
	C	0-7	Interior	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	50	53	53	45	53	52	37	50	45	31	43	39	26	38	34	22	33	30	19	29	26	16			
			Exposed	53	53	53	53	53	49	53	43	53	38	53	49	34	49	44	30	45	40	27	38	24	32	34	22	33	29	19	28	25	16	25	22	13	22	19	12	19	17	10			
		7-20	Interior	52	52	46	52	52	44	52	52	39	52	51	36	52	46	32	52	42	29	52	38	27	44	32	23	38	27	19	33	24	17	28	21	15	25	18	13	22	16	11			
			Exposed	52	46	32	52	41	29	51	36	26	45	33	23	41	30	21	37	27	19	34	25	17	29	34	21	15	25	18	13	21	15	11	18	13	9	16	12	8	14	10	7		
		20-27	Interior	52	52	43	52	47	39	52	42	35	52	38	31	52	34	28	48	31	26	44	29	24	37	24	20	32	21	17	27	18	15	24	16	13	21	14	11	19	12	10			
			Exposed	52	34	28	47	30	25	42	27	23	38	25	20	34	22	18	31	20	17	29	19	15	24	16	13	21	13	11	18	12	10	16	10	8	14	9	7	12	8	6			
10	D	0-7	Interior	52	52	52	52	52	52	52	52	52	52	51	52	52	45	52	52	40	52	50	35	52	42	28	52	36	24	52	31	21	46	27	18	41	24	16	36	21	14				
			Exposed	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	50	53	53	45	53	52	37	50	45	31	43	39	26	38	34	22	33	30	19	29	26	16			
		7-20	Interior	52	52	41	52	46	32	46	41	28	42	37	25	38	34	22	34	31	20	32	28	18	27	24	15	23	20	12	20	18	11	17	15	9	15	14	8	13	12	7			
			Exposed	52	38	27	47	34	24	42	30	21	38	27	19	34	25	17	31	23	16	28	21	15	24	17	12	20	15	10	18	13	9	15	11	8	14	10	7	12	9	6			
		20-27	Interior	52	44	36	52	39	32	52	35	29	49	32	26	44	29	24	40	26	22	37	24	20	31	20	17	26	17	14	23	15	12	20	13	11	18	11	9	16	10	8			
			Exposed	44	29	24	39	25	21	35	23	19	32	21	17	29	19	15	26	17	14	24	16	13	20	13	11	17	11	9	15	10	8	13	8	7	11	7	6	10	7	5			
	B	0-7	Interior	52	52	39	52	48	33	52	43	29	52	38	26	52	35	24	52	32	21	50	29	20	42	24	17	36	21	14	31	18	12	27	16	11	24	14	9	21	12	8			
			Exposed	52	35	24	52	31	21	48	28	19	43	25	17	39	23	15	35	21	14	32	19	13	27	16	11	23	14	9	20	12	8	18	10	7	15	9	6	14	8	5			
		7-20	Interior	53	53	49	53	53	43	53	53	38	53	48	33	49	44	30	44	40	27	41	36	24	37	31	20	29	26	16	25	23	14	22	20	12	19	17	11	17	15	9			
			Exposed	49	43	30	43	39	26	39	35	23	35	31	20	32	28	18	29	26	16	26	24	15	22	20	12	19	17	10	17	15	9	14	13	8	13	11	7	11	10	6			
		C	0-7	Interior	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	32	36	28	36	34	24	36	29	21	36	26	18	32	23	16			
				Exposed	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	32	36	30	21	35	25	18	30	22	15	26	19	14	23	17	12	21
	7-20		Interior	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	
			Exposed	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	
	20-27		Interior	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	
			Exposed	48	48	45	48	48	38	48	48	38	48	43	38	43	29	48	39	26	48	35	24	48	32	22	47	27	18	40	23	16	34	20	14	30	17	12	26	15	10	23	14	9	
	D	0-7	Interior	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51		
			Exposed	51	51	51	51	51	49	51	51	43	51	51	38	51	49	34	49	34	40	45	40	27	38	34	22	33	29	19	28	25	16	25	22	13	22	19	12	19	17	10			
		7-20	Interior	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	
			Exposed	36	36	32	36	36	29	36	36	26	36	33	23	36	30	21	36	27	19	34	25	17	29	34	21	15	25	18	13	21	15	11	18	13	9	16	12	8	14	10	7		
20-27		Interior	36	34	28	36	30	25	36	27	23	36	25	20	34	22	18	31	20	17	29	19	15	24	16	13	21	13	11	18	12	10	16	10	8	14	9	7	12	8	6				
		Exposed	48	48	48	48	48	42	48	48	37	48	46	32	48	42	28	48	38	26	48	35	23	48	29	20	43	25	17	37	22	15	32	19	13	28	17	11	25	15	10				
20	B	0-7	Interior	48	41	28	48	37	25	48	33	22	48	30	20	47	27	18	42	25	17	39	22	15	33	19	13	28	16	11	24	14	10	21	12	8	18	11	7	16	10	6			
			Exposed	51	51	51	51	51	49	51	51	43	51	51	38	51	49	34	49	34	40	45	40	27	38	34	22	33	29	19	28	25	16	25	22	13	22	19	12	19	17	10			
		7-20	Interior	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	
			Exposed	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	
		20-27	Interior	48	41	28	48	37	25	48	33	22	48	30	20	47	27	18	42	25	17	39	22	15	33	19	13	28	16	11	24	14	10	21	12	8	18	11	7	16	10	6			
			Exposed	51	51	51	51	51	49	51	51	43	51	51	38	51	49	34	49	34	40	45	40	27	38	34	22	33	29	19	28	25	16	25	22	13	22	19	12	19	17	10			
	C	0-7	Interior	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36																	

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]



11

30 ft

Roof Height

Ss = 3.00
Seismic

23 sq.ft

ORIENTATION

CROSS-SLOPE
Rail Direction

Trim	Rail Type
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
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36	36
37	37
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79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

SFM
Clamp

SFM DtD-Ply

SPAN TABLES

Maximum Allowable Spans for Rooftop Solar Panels Parallel to the Roof Surface (inches)

[illegible]

[illegible]

Maximum Allowable Spans for Rooftop Solar Panels Parallel to the Roof Surface (inches)

Ground Snow Load (psf)	Wind Exposure Category	Roof Tilt Angle (deg)	Panel Exposure	Basic Wind Speed (mph)																																																																													
				90						95						100						105						110						115						120						130						140						150						160						170						180					
				Roof Wind Zone																																																																													
				1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3																																	
0	B	0-7	Interior	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50																														
			Exposed	50	50	45	50	50	40	50	50	36	50	46	32	50	42	29	50	38	27	48	35	24	40	29	21	34	25	18	30	21	15	26	19	13	23	16	12	20	15	10	10	10	10	10	10	10	10	10	10	10	10																												
		7-20	Interior	50	50	50	50	50	50	50	50	49	50	50	44	50	48	40	50	44	36	50	40	33	50	34	28	45	29	24	38	25	21	33	22	18	29	19	16	26	17	14	14	14	14	14	14	14	14	14	14	14	14																												
			Exposed	50	48	40	50	43	35	50	38	32	50	35	28	48	31	26	44	28	23	40	26	21	34	22	18	29	19	15	25	16	13	22	14	12	19	12	10	17	11	9	9	9	9	9	9	9	9	9	9	9	9																												
		20-27	Interior	51	51	51	51	51	51	51	51	51	51	51	51	51	51	50	51	51	44	51	44	51	39	51	49	34	51	41	28	51	35	24	51	30	20	45	26	18	40	23	16	35	20	14	14	14	14	14	14	14	14																												
			Exposed	51	51	44	51	51	37	51	47	33	51	42	29	51	38	26	51	34	23	51	31	21	46	27	18	39	23	15	34	20	13	29	17	12	26	15	10	23	13	9	9	9	9	9	9	9	9	9	9	9	9																												
	27-45	Interior	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52																													
		Exposed	52	52	52	52	52	48	52	42	52	42	52	37	52	47	33	48	43	29	44	39	27	37	33	22	32	28	18	28	25	15	24	21	13	21	19	12	19	12	19	17	10	10	10	10	10	10	10	10	10																														
	C	0-7	Interior	50	50	49	50	50	43	50	50	39	50	50	35	50	45	31	50	41	29	50	37	26	43	31	22	37	27	19	32	23	16	28	20	14	24	18	12	22	16	11	7	7	7	7	7	7	7	7	7	7	7	7																											
			Exposed	50	45	31	50	40	28	49	36	25	44	32	23	40	29	20	36	26	19	33	24	17	28	20	14	24	17	12	21	15	11	18	13	9	16	12	8	14	10	7	6	6	6	6	6	6	6	6	6	6	6																												
		7-20	Interior	50	50	43	50	46	38	50	41	34	50	37	31	50	34	28	47	31	25	43	28	23	36	24	19	31	20	17	27	17	14	23	15	13	20	13	11	18	12	10	10	10	10	10	10	10	10	10	10	10	10																												
			Exposed	50	33	28	46	30	25	41	27	22	37	24	20	34	22	18	31	20	16	28	18	15	24	15	13	20	13	11	17	11	9	15	10	8	13	9	7	12	8	6	6	6	6	6	6	6	6	6	6	6																													
20-27		Interior	51	51	48	51	51	41	51	50	36	51	45	31	51	41	28	51	37	25	51	34	23	49	29	19	42	24	17	36	21	14	32	18	12	28	16	11	25	14	10	10	10	10	10	10	10	10	10	10	10	10																													
		Exposed	51	41	27	51	36	25	51	32	22	50	29	20	46	26	18	41	24	16	38	22	15	32	19	13	27	16	11	24	14	9	21	12	8	18	11	7	16	9	6	6	6	6	6	6	6	6	6	6																															
27-45	Interior	52	52	52	52	52	52	52	52	46	52	52	40	52	51	36	52	46	32	47	42	29	40	36	24	34	31	20	26	17	26	23	14	23	20	12	20	18	11	7	7	7	7	7	7	7	7	7	7	7																															
	Exposed	52	51	36	51	45	31	45	41	27	41	37	24	37	33	22	34	30	19	31	28	17	26	23	14	22	20	12	19	17	11	17	15	9	15	13	8	13	12	7	6	6	6	6	6	6	6	6	6	6																															
D	0-7	Interior	50	50	40	50	50	36	50	46	32	50	41	29	50	37	26	47	34	24	43	31	22	36	26	18	31	22	16	27	19	14	23	17	12	20	15	10	18	13	9	9	9	9	9	9	9	9	9	9	9	9																													
		Exposed	50	37	26	46	33	23	41	30	21	37	27	19	34	24	17	30	22	16	28	20	14	23	17	12	20	15	10	17	13	9	15	11	8	13	10	7	12	9	6	6	6	6	6	6	6	6	6	6	6																														
	7-20	Interior	50	43	36	50	38	32	50	34	28	48	31	26	43	28	23	39	26	21	36	23	19	30	20	16	26	17	14	22	15	12	20	13	10	17	11	9	15	10	8	8	8	8	8	8	8	8	8	8	8	8																													
		Exposed	43	28	23	38	25	21	34	22	18	31	20	17	28	18	15	26	17	14	23	15	13	20	13	11	17	11	9	15	9	8	13	8	7	11	7	6	10	6	5	5	5	5	5	5	5	5	5																																
	20-27	Interior	51	51	38	51	47	33	51	42	28	51	38	25	51	34	23	51	31	21	49	28	19	41	24	16	35	20	14	30	18	12	26	15	10	23	14	9	21	12	8	5	5	5	5	5	5	5	5	5	5																														
		Exposed	51	34	23	51	30	21	47	27	18	42	24	17	38	22	15	35	20	14	32	18	13	27	16	11	23	13	9	20	11	8	17	10	7	15	9	6	13	8	5	5	5	5	5	5	5	5	5	5																															
27-45	Interior	52	52	48	52	52	42	52	52	37	52	47	33	48	43	29	43	29	43	29	43	39	26	40	35	23	33	30	19	29	26	16	25	22	14	22	19	12	19	17	10	10	10	10	10	10	10	10	10	10	10																														
	Exposed	47	42	29	42	38	25	38	34	22	34	31	20	31	28	18	28	25	16	26	23	14	22	20	12	19	17	10	16	14	9	14	13	8	12	11	7	11	10	6	6	6	6	6	6	6	6	6	6																																
10	B	0-7	Interior	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35																													
			Exposed	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35																											
		7-20	Interior	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36																											
			Exposed	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36																										
		20-27	Interior	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47																												
			Exposed	47	47	44	47	47	37	47	47	33	47	42	29	47	38	26	47	34	23	47	31	21	46	27	18	39	23	15	34	20	13	29	17	12	26	15	10	23	13	9	9	9	9	9	9	9	9	9	9	9	9																												
	27-45	Interior	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50																											
		Exposed	50	50	50	50	50	48	50	50	42	50	50	37	50	47	33	48	43	29	44	39	27	37	33	22	32	28	18	28	25	15	24	21	13	21	19	12	19	12	19	17	10	10	10	10	10	10	10	10	10	10	10	10																											
	C	0-7	Interior	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35																												

[illegible]

[illegible]



Risk Category

Roof Height

Seismic

Module Area

Orientation

Rail Direction

Rail Type

Clamp

Attachment

Maximum Allowable Spans for Rooftop Solar Panels Parallel to the Roof Surface (inches)

[illegible]